

TWO NEW SPECIES OF PIPEWORT

Harold N. Moldenke

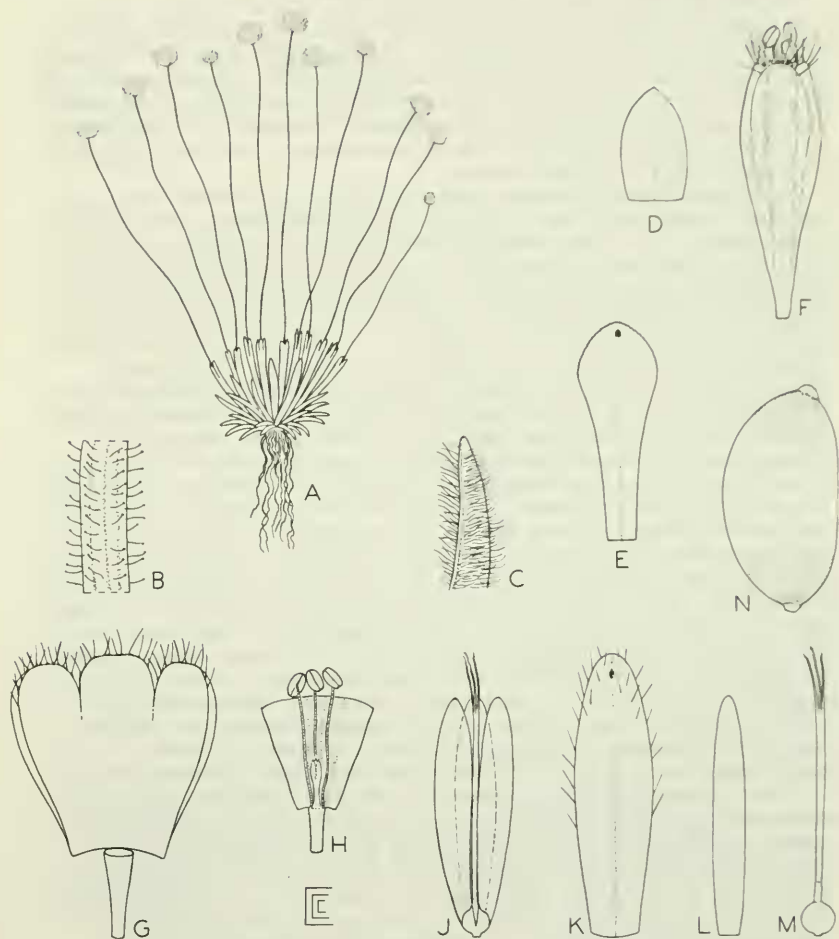
PAEPALANTHUS RESTINGENSIS Moldenke, sp. nov.

Herba acaulescens; foliis rosulatis ca. 1 cm. longis 2 mm. latis, apice subacutis vel acutis juventute utrinque densiuscule villosopubescentibus, senectute glabrescentibus opacis olivaceis; pedunculis pluris 9--20 erectis 7--9 cm. longis villosulis brunneostamineis 4-sulcatis, pilis divergentibus tenuissimis capitulatis; vaginis ca. 2 cm. longis, arcte adpressis densissime villosulis, ad apicem fissis; capitulis ovato-subrotundatis vel hemisphaericis 6--8 mm. longis latisque griseis.

Acaulescent herb; leaves rosulate-cespitose, about 1 cm. long and 2 mm. wide, subacute or acute at the apex, rather densely villosopubescent on both surfaces when young, glabrescent in age, opaque, olivaceous, not fenestrate; peduncles usually many, 9--20 per plant, straight, erect, 7--9 cm. long, 4-dulcate, only very slightly twisted, brownish-stramineous, villosulous throughout, the hairs diverging at right angles, very slender, very slightly capitate; sheaths about 2 cm. long, surpassing the leaves, closely appressed to the peduncle base, very densely villosulous throughout, 2--4-split at the apex; heads ovate-subrotund or hemispheric, 6--8 mm. long and wide, gray; involucre bractlets stramineous, oblong-elliptic, about 1.5 mm. long and 0.8 mm. wide, pilosulous on the outer surface; receptacular bractlets spatulate, concave, gray, about 3 mm. long and 1 mm. wide, obtuse at the apex, with a black spot at the center near the apex; staminate florets pedicellate: sepals 3, united for almost $2/3$ their length, about 3.5 mm. long and 1.4 mm. wide, concave, rounded and pubescent at the apex; stamens 3, slightly exserted; anthers 2-celled; pistillate florets sessile: sepals 3, separate to the base, narrow-elliptic, concave, about 5 mm. long and 1.4 mm. wide, obtuse at the apex, pilose, with a small blackish spot at the center near the apex; petals 3, separate to the base, narrow-elliptic, about 4 mm. long and 0.6 mm. wide, glabrous; pistil one; style capillary, glabrous, about 3.5 mm. long; stigmas 3, about 1 mm. long; ovary rotund, about 0.7 mm. long and wide, glabrous.

The type of this species was collected by R. P. Belém and R. S. Pinheiro (no. 3181) in the restinga at Marau, Bahia, Brazil, on January 18, 1967, and is deposited in my personal herbarium at Plainfield, New Jersey. The collectors describe the plant as "Planta de 5 cm.; infl. arroxeada". Plate I: A -- habit x $1/2$; B -- hairs on peduncle x 10; C -- portion of leaf x 4; D -- involucre bractlet x 10; E -- receptacular bractlets x 10; F -- staminate floret x 15; G -- calyx of staminate floret x 15; H -- corolla dissected from young staminate floret x 15; J -- pistillate floret x 15; K -- sepal from pistillate floret x 15; L -- petal from pistillate floret x 15; M -- gynoecium x 15; N -- seed x 50. [Drawn by Charles C. Clare, Jr., August 1968].

Plate I



SYNGONANTHUS ROBINSONII Moldenke, sp. nov.

Herba acaulescens; foliis rosulatis usque ad 1 cm. longis 1 mm. latis ubique dense adpresseque albido-pilosulis, ad apicem subacutis, ad basin lanigeris; pedunculis plerumque 3 erectis stramineis 15--28 cm. longis 3-costatis nitidis minute pilosulis; vaginis 3.5--4 cm. longis arcte adpressis minute pilosulis ad apicem fissis; capitulis hemisphaericis albis ca. 6 mm. latis.

Acaulescent herb; leaves rosulate, cespitose, numerous, linear, to 10 mm. long and about 1 mm. wide, densely appressed-whitish-pilosulous on both surfaces, subacute at the apex, densely white-lanate at the base; peduncles mostly 3 per plant, erect, straight, 15--28 cm. long, 3-sulcate and 3-costate, slightly twisted, shiny, minutely pilosulous throughout with short and irregular, weak, gland-tipped hairs at right angles to the peduncle; sheaths brown, 3.5--4 cm. long, closely appressed to the peduncle, minutely pilosulous throughout with hairs similar to those on the peduncle, split at the apex, the blade erect and appressed; heads hemispheric, white, about 6 mm. wide; involucre bractlets lanceolate, stramineous, about 2.5 mm. long and 0.9 mm. wide, concave, pilose on the lower 1/3, acute at the apex; receptacular bractlets narrow-lanceolate, about 2.4 mm. long and 0.5 mm. wide, concave, acute at the apex, pilose throughout on the back; staminate florets short-pedicellate: sepals 3, united for about 1/2 their length, about 1.5 mm. long and 0.4 mm. wide, obtuse at the apex, pilose on the back except at the very apex; petals 3, united into a tube about 0.6 mm. long, glabrous; stamens 3, the filaments adnate to the corolla to its apex, the free portion about 0.2 mm. long, glabrous; anthers 2-celled; pistillate florets long-pedicellate; sepals 3, separate, lanceolate-ovate, about 1.9 mm. long and 0.4 mm. wide, concave, bluntly subacute at the apex, sparsely pilosulous on the back; petals 3, connate at about the middle, linear-lingulate, about 1.1 mm. long and 0.15 mm. wide, barbate-pilose at the apex; pistil one; style about 0.9 mm. long, glabrous; stigmas 3, about 0.25 mm. long; style-branches 3, similar to the stigmas in size; ovary 3-celled, 3-seeded.

The type of this species, compared at the Royal Botanic Gardens in Kew and there confirmed as new, was collected in shallow soil over sandstone at Kasanshi Dambo, 55 km. east-southeast of Mporokoso, Northern Nigeria, by E. A. Robinson (no. 5167) -- in whose honor it is named -- on May 13, 1962, and is deposited in the Britton Herbarium at the New York Botanical Garden. Plate II: A -- habit x 1/2; B -- glandular hairs on peduncle x 20; C -- involucre bractlet, exterior view x20; D -- receptacular bractlet x 20; E -- staminate floret x 20; F -- corolla of staminate floret dissected, sepals removed x 20; G -- sepals of staminate floret x 20; H -- pistillate floret x 20; J -- petal of pistillate floret x 25; K -- gynoecium x 20; L -- seed x 50. [Drawn by Charles C. Clare, Jr., August 1968].

Plate II

